REMARKS

Claims 12, 13, 15-23, and 25-37 were previously pending in the application. Claims 12, 13, 15-23, and 25-37 remain unchanged. Claims 12, 21, and 37 are independent.

Entry of this Response is proper because it does not raise any new issues requiring further search by the Examiner, narrows the issues on appeal, and is believed to place the present application in condition for immediate allowance.

The Claimed Invention

In conventional refrigeration devices, a storage compartment is cooled by blowing cooled and dried air into the storage compartment with the aid of a fan at the evaporator and extracting relatively warm moist air from the storage compartment into an evaporator chamber. The storage compartment is not only cooled but also de-humidified and the moisture is deposited on the evaporator. However, under some ambient conditions, stored foodstuffs may be dried out by the intensive de-humidification.

An exemplary embodiment of the claimed invention, as recited by, for example, independent claim 12, is directed to a no-frost refrigeration device comprising a control circuit which makes an average circulation power of said fan variable during an activation phase of said evaporator based on at least one air conditioning parameter, said control circuit controlling the operation of said evaporator and said fan set up to **intermittently operate said fan** during said activation phase of said evaporator.

An exemplary embodiment of the claimed invention, as recited by, for example, independent claim 21, is directed to a method for operating a refrigeration device including a control circuit which makes an average circulation power of said fan variable during an activation phase of said evaporator, comprising the steps of a) estimating a moisture value in said storage compartment; b) selecting a circulating power for said fan as a function of said estimated moisture value; c) operating said fan at said selected circulating power; and d) controlling the operation of said evaporator and **intermittently operating said fan** during said activated phase of said evaporator.

An exemplary embodiment of the claimed invention, as recited by, for example, independent claim 37, is directed to a no-frost refrigeration device, comprising at least one storage compartment; an evaporator chamber that is separated from the storage compartment; an evaporator which is alternately activated and deactivated located in the evaporator chamber; a fan that circulates air between the storage compartment and the evaporator chamber; a control circuit which makes an average circulation power of the fan variable during an activation phase of the evaporator based on at least one air conditioning parameter; and at least one air conditioning sensor that records the at least one air conditioning parameter, wherein the at least one air conditioning parameter is a moisture value of one of ambient air and air in the at least one storage compartment, wherein the control circuit **intermittently operates the fan** during the activation phase of the evaporator, and wherein the control circuit is coupled to the at least one air conditioning sensor and the control circuit regulates the speed of the fan using the at least one air conditioning parameter recorded by the sensor.

In this manner, the present invention provides a no-frost refrigeration device and an operating method for such a device which allows flexible adaptation to the climatic conditions in the environment of the refrigerator, thereby controlling de-humidification and reducing drying out of stored foodstuffs by the de-humidification.

The Rejection under 35 U.S.C. § 102

Claims 12 and 17-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by the Trask reference (U.S. 2,549,547). Applicant respectfully traverses this rejection.

The Trask reference does not disclose the features of independent claim 12, including:

> "a control circuit which makes an average circulation power of said fan variable during an activation phase of said evaporator based on at least one air conditioning parameter, **said control circuit controlling the operation of said evaporator and said**

fan set up to intermittently operate said fan during said activation phase of said evaporator."

The Office Action asserts that the Trask reference teaches that the control circuit controls the operation of the evaporator (col. 6, lines 45-55) and the fan set up to intermittently (which the Office Action asserts is interpreted as a variable, non-constant operation) operate the fan during the activation phase of the evaporator (fan 46, driven by a variable speed fan motor 47; col. 6, lines 29-30).

The Response to Arguments of the final Office Action asserts that:

> "according to another web-based dictionary, "intermittent" is also "not steady"; thus, whether "intermittent" is interpreted as "non-constant", "variable" or "not steady", Trask teaches that the circuit (FIG. 7) controls the speed of the fan motor in a variable manner (col. 6, lines 66-73)."

The Office Action does not cite any support for this internet definition or explain why this definition is a reasonable interpretation of the claimed term in view of the teachings of the present application.

Applicant respectfully submits that the Office Action fails to apply the correct standard for claim interpretation. Applicant respectfully submits that claim interpretation is not based solely on *any* dictionary definition without regard for the teachings of the specification of the invention. Moreover, the claim interpretation is not properly selected based on the interpretation that corresponds to the applied references.

Instead, M.P.E.P. § 2111 states that:

> During patent examination, the pending claims must be "given their **broadest reasonable** interpretation ***consistent with*** **the specification**." >The Federal Circuit's en banc decision in Phillips

> v. AWH Corp., 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005) expressly recognized that the USPTO employs the "broadest reasonable interpretation" standard:
> The Patent and Trademark Office ("PTO") determines the scope of claims in patent applications **not solely on the basis of the claim language**, but upon giving claims their **broadest reasonable construction "in light of the specification as it would be interpreted by one of ordinary skill in the art**." In re Am. Acad. of Sci. Tech. Ctr., 367 F.3d 1359, 1364[, 70 USPQ2d 1827] (Fed. Cir. 2004). Indeed, the rules of the PTO require that application claims must "conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description." 37 CFR 1.75(d)(1).
> [...]
> The broadest reasonable interpretation of the claims **must also be consistent with the interpretation that those skilled in the art would reach**. In re Cortright, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999)[...].

Emphasis added Applicant.

Contrary to the assertions in the Office Action, the term "intermittently" as used in the claims and specification, clearly does not mean "non-constant", "variable" or "not steady" operation, and the Office Action errs in interpreting the term "intermittently" in a manner that is **inconsistent with the specification** or the interpretation one of ordinary skill in the art will give the term. Instead, the claims, specification, and drawings of the present application clearly use the term "intermittently" to describe **a fan that is**

activated and deactivated, not simply "non-constant", "variable" or "not steady" operation, as alleged by the Office Action. See, e.g., Fig. 2; see also page 2, lines 14-21; page 4, lines 25-30; and page 5, lines 20-28. The curve 9' of Figure 2 clearly shows the intermittent operation of the fan **as being activated and deactivated**.

For example, the present application states, at page 2, lines 14-21:

> A variable circulation power of the evaporator can be simply achieved by **making the fan capable of being deactivated temporarily** in the activated phase of the evaporator. Advantageously, a **control circuit** is provided **for controlling the operation of** the evaporator and **the fan** which is set up to **intermittently operate the fan** when the evaporator is activated and thereby throttle its average circulation power compared to continuous operation.

Emphasis added Applicant.

The present application states, at page 4, lines 25-30:

> A **control circuit 10** is connected to a temperature sensor 12 arranged in the cooling compartment and via control leads to the compressor 3 and the fan 9 and is capable of **activating or de-activating** the compressor 3 and **the fan 9**, and indirectly via the compressor 3 the evaporators 4, 5, depending on a temperature recorded by the temperature sensor 12.

Emphasis added Applicant.

Contrary to the assertions in the Response to Argument of the Office Action, Figure 2 clearly shows curve 9', which is the operation of the fan 9. The present application states, at page 5, lines 20-28:

> From t_0 to t_1 the air humidity recorded by the sensor 13 in the cooling compartment 1 is at a constant low level. When the compressor 3 is activated, at time t_1 **the fan 9 also starts operating, as shown by a curve 9'**. The temperature of the evaporator 5, shown by curve 5', returns from a rest value T_0 to a value T_1. Moisture from the air circulated by the fan 9 is deposited on the evaporator 5 so that the air humidity 13' decreases slowly as far as the time t_2 **when the fan 9 is de-activated**.

Emphasis added Applicant.

Thus, the claims, specification, and drawings of the present application clearly use the term "intermittently" to describe **a fan that is activated and deactivated**, not simply "non-constant", "variable" or "not steady" operation, as alleged by the Office Action. The curve 9' of Figure 2 clearly shows the intermittent operation of the fan **as being activated and deactivated**.

The use of the term "intermittently" in the specification, drawings, and claims is consistent with the ordinary definition of the term 'intermittently', which commonly is defined, for example, as "coming and going at intervals [...] not continuous [...] occasional" by Merriam-Webster Online Dictionary, © 2011 Merriam-Webster, Incorporated, 6 June 2011 http://www.merriam-webster.com/dictionary/intermittent.

The Response to Arguments of the final Office Action further asserts that:

> "***Although applicant's interpretation of "intermittent" is consistent with ordinary definition*** (second full paragraph of page 10), **the Examiner's interpretation of "intermittent" is also consistent with ordinary definition**, thus the features of claim 12 are taught by Trask. As argued further by the applicant on page 12, second to last paragraph, claim language does not call for switching on and off of the fan, as alleged by applicant."

Emphasis added Applicant.

Contrary to these assertions, Applicant respectfully submits that the correct standard is not whether *the Office Action's interpretation* is consistent with any ordinary meaning of the term, or whether *the Office Action's interpretation* is consistent with the applied references. Instead, as explained above, the interpretation **must be *consistent with* Applicant's specification as it would be interpreted by one of ordinary skill in the art**. See M.P.E.P. § 2111.

The Office Action has not identified any teaching or support in Applicant's specification in which the term "intermittently" is reasonably interpreted as being "non-constant", "variable" or "not steady" operation. Indeed, as explained above, the Office Action's interpretation is inconsistent with the use of the term "intermittently" in the present application.

For these reasons, Applicant respectfully submits that the Office Action fails to apply the correct standard for claim interpretation and clearly errs in interpreting the term "intermittently" to mean "non-constant", "variable" or "not steady" operation. Thus, the Office Action fails to establish that all of the features of claim 12 are shown by any of the applied references.

Second, the Trask reference does not teach a control circuit controlling the operation of said evaporator and said fan set up to intermittently operate the fan during an activation phase of the evaporator, as claimed (i.e., the Trask reference does not switch the fan on and off intermittently). Instead, col. 6, lines 66-73, of the Trask reference teaches a variable speed fan motor that **runs at a reduced speed or at full speed**. Thus, in the Trask reference, the fan is **continuously operated**, and **not intermittently** operated, as claimed.

For these reasons, the Trask reference fails to disclose all of the features of claim 12, and therefore, does not anticipate claim 12.

Claims 17-20 are patentable by virtue of their dependency from claim 12, as well as for the additional features recited therein.

Applicant respectfully requests withdrawal of this rejection.

The Rejections under 35 U.S.C. § 103

Claim 13 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the Trask reference in view of the Marques et al. reference (U.S. Patent No. 5,490,394). Claims 15 and 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Trask reference in view of the Shima et al. reference (U.S. Patent No. 5,931,011). Claim 19 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the Trask reference in view of the Baker reference (U.S. Patent No. 4,315,413). Claims 21-24, 26-34, and 37 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Trask reference in view of the Kelly et al. reference (U.S. Patent No. 6,508,408). Claim 25 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the Trask reference, the Kelly et al. reference, and the Shima et al. reference. Claims 35 and 36 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Trask reference in view of the Pesko reference (U.S. Patent No. 6,290,140).

Applicant respectfully traverses these rejections.

The Rejection over the Trask reference in view of the Marques et al. reference

Claim 13 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the Trask reference in view of the Marques et al. reference. Applicant respectfully traverses this rejection.

Claim 13 is patentable by virtue of its dependency from claim 12, as well as for the additional features recited therein.

Independent claim 12 recites that said control circuit controlling the operation of said evaporator and said fan set up to intermittently operate said fan during said activation phase of said evaporator. As explained above, the Office Action asserts that the Trask reference teaches that the control circuit controls the operation of the evaporator (col. 6, lines 45-55) and the fan set up to intermittently (which the Office Action asserts is interpreted as a variable, non-constant operation) operate the fan during the activation phase of the evaporator (fan 46, driven by a variable speed fan motor 47; col. 6, lines 29-30).

First, contrary to the assertions in the Office Action, the term 'intermittently' as used in the claims and specification, does not mean variable, non-constant operation, and the Office Action errs in interpreting the term 'intermittently' to mean a variable, non-constant operation. Instead, the claims, specification, and drawings of the present application clearly use the term intermittently to describe the fan that is activated and deactivated, not simply variable or non-constant activation or operation, as alleged by the Office Action. See, e.g., Fig. 2; see also page 2, lines 14-21. Figure 2 clearly shows the intermittent operation of the fan as being activated and deactivated.

Therefore, the Office Action errs in interpreting the term 'intermittently' to mean a variable, non-constant operation. The Office Action fails to establish that the features of claim 14 are shown by any of the applied references.

Second, neither the Trask reference nor the Marques et al. reference teach a control circuit controlling the operation of said evaporator and said fan set up to

intermittently operate said fan during said activation phase of said evaporator, as claimed (i.e., the Trask reference does not switch the fan on and off intermittently). Instead, col. 6, lines 66-73, of the Trask reference teaches a variable speed fan motor that **runs at a reduced speed or at full speed**. Thus, the fan is **continuously operated**, and not intermittently operated, as claimed.

The Marques et al. reference simply teaches maintaining the fan inactive when the compressor starts a new operative cycle. The Marques et al. reference teaches that the fan has its operation interrupted by a switch CH when the door of the refrigerating appliance is opened.

For these reasons, Applicant respectfully submits that these features are not an obvious variation of the teachings of the Trask reference or Marques et al. reference, either individually or in combination, and would not be obvious to try based on the teachings of these references and without the benefit of the teachings of the present invention.

Applicant respectfully requests withdrawal of this rejection.

The Rejection over the Trask reference and the Shima et al. reference

Claims 15 and 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Trask reference in view of the Shima et al. reference. Applicant respectfully traverses this rejection.

Claims 15 and 16 are patentable by virtue of their dependency from claim 12, as well as for the additional features recited therein.

For the reasons set forth above, the Trask reference fails to anticipate all of the features of claim 12. The Shim et al reference does not remedy the deficiencies of the Trask reference, and therefore, the features of the claims are not rendered obvious from the alleged combination of references.

The Shima et al. reference also does not disclose that "said control circuit controlling the operation of said evaporator and said fan set up to intermittently operate said fan *during said activated phase of said evaporator*," as recited in claim 12. Instead,

the fan 18 clearly only is operated at maximum rotation speed when the freezing cycle system is activated, and at best, only is operated intermittently when the freezing cycle is deactivated. Indeed, as clearly shown for example in FIGS. 2, 3, and 15, and described throughout the Shima et al. reference, neither the compressor 14 nor the condenser 15 is in an activation phase when the cabinet fan 18 is intermittently operated. Instead, both the compressor 14 and the condenser 15 are deactivated while the cabinet fan 18 is intermittently operated. See, e.g., col. 7, lines 1-4; col. 13, lines 36-40; see also FIG. 15 at 174b; see also claims at col. 13, line 65 to col. 16, line 61.

As shown in Figure 2, the compressor 14 and the condenser 15 are part of the loop that includes the evaporator 13. Since the driving circuit 22 is in communication only with the compressor 14, it appears that the evaporator 13 also is deactivated when the cabinet fan 18 is intermittently operated, as shown in Figure 3.

Thus, the Shim et al reference does not remedy the deficiencies of the Trask reference.

For these reasons, Applicant respectfully submits that these features are not an obvious variation of the teachings of the Trask reference or the Shim et al reference, either individually or in combination, and would not be obvious to try based on the teachings of these references and without the benefit of the teachings of the present invention.

Applicant respectfully requests withdrawal of this rejection.

The Rejection over the Trask reference in view of the Baker reference

Claim 19 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the Trask reference in view of the Baker reference. Applicant respectfully traverses this rejection.

Claim 19 is patentable by virtue of its dependency from claim 12, as well as for the additional features recited therein.

The Baker reference does not remedy the deficiencies of the Trask reference. Moreover, one of ordinary skill in the art would not have had an apparent reason to modify the Trask reference to include the speed controller of the Baker reference.

The Baker reference is directed to a room air conditioning unit that has buttons for setting the speed of the air coming from the air conditioning unit to a speed that is comfortable for a person in the room. The speed control taught by the Baker reference has absolutely nothing to do with controlling the speed of a fan inside a no-frost refrigeration device. Thus, the Baker reference does not remedy the deficiencies of the Trask reference.

For these reasons, Applicant respectfully submits that the features of claim 19 are not an obvious variation of the teachings of the Trask reference or the Baker reference, either individually or in combination, and would not be obvious to try based on the teachings of these references and without the benefit of the teachings of the present invention.

Applicant respectfully requests withdrawal of this rejection.

The Rejection over the Trask reference and the Kelly et al. reference

Claims 21-24, 26-34, and 37 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Trask reference in view of the Kelly et al. reference. Applicant respectfully traverses this rejection.

Independent claim 21 recites a method for operating a refrigeration device, [...] comprising the steps of: a) estimating a moisture value in said storage compartment; b) selecting a circulating power for said fan as a function of said estimated moisture value; c) operating said fan at said selected circulating power; and d) controlling the operation of said evaporator and intermittently operating said fan during said activated phase of said evaporator.

Independent claim 37 recites a no-frost refrigeration device, comprising a control circuit which makes an average circulation power of the fan variable during an activation phase of the evaporator based on at least one air conditioning parameter; and at least one

air conditioning sensor that records the at least one air conditioning parameter, wherein the at least one air conditioning parameter is a moisture value of one of ambient air and air in the at least one storage compartment, wherein the control circuit intermittently operates the fan during the activation phase of the evaporator, and wherein the control circuit is coupled to the at least one air conditioning sensor and the control circuit regulates the speed of the fan using the at least one air conditioning parameter recorded by the sensor.

These features are important for providing a no-frost refrigeration device and an operating method for such a device which allows flexible adaptation to the climatic conditions in the environment of the refrigerator, thereby controlling de-humidification and reducing drying out of stored foodstuffs by the de-humidification.

As explained above, the Office Action asserts that the Trask reference teaches that the control circuit controls the operation of the evaporator (col. 6, lines 45-55) and the fan set up to intermittently (which the Office Action asserts is interpreted as a variable, non-constant operation) operate the fan during the activation phase of the evaporator (fan 46, driven by a variable speed fan motor 47; col. 6, lines 29-30).

Contrary to the assertions in the Office Action, the term 'intermittently' as used in the claims and specification, does not mean variable, non-constant operation, and the Office Action errs in interpreting the term 'intermittently' to mean a variable, non-constant operation. Instead, the claims, specification, and drawings of the present application clearly use the term intermittently to describe the fan that is activated and deactivated, not simply variable or non-constant activation or operation, as alleged by the Office Action. See, e.g., Fig. 2; see also page 2, lines 14-21. Figure 2 clearly shows the intermittent operation of the fan as being activated and deactivated.

The use of the term intermittently in the specification, drawings, and claims is consistent with the ordinary definition of the term 'intermittently', which commonly is defined, for example, as "coming and going at intervals [...] not continuous [...] occasional" by Merriam-Webster Online Dictionary, © 2011 Merriam-Webster, Incorporated, 6 June 2011 http://www.merriam-webster.com/dictionary/intermittent.

Therefore, the Office Action errs in interpreting the term 'intermittently' to mean a variable, non-constant operation. The Office Action fails to establish that the features of claim 14 are shown by any of the applied references.

Second, the Trask reference does not teach a control circuit controlling the operation of said evaporator and said fan set up to intermittently operate said fan during said activation phase of said evaporator, as claimed. Instead, col. 6, lines 66-73, of the Trask reference teaches a variable speed fan motor that runs at a reduced speed or at full speed. Thus, the fan is continuously operated, and not intermittently operated, as claimed.

Third, Applicant respectfully submits that one of ordinary skill in the art would not have modified the Trask reference in view of the Kelly et al. reference as alleged by the Office Action. Indeed, the Examiner may not rely upon the Kelly et al. reference under 35 U.S.C. § 103 because the Kelly et al. reference is non-analogous art. To qualify as analogous art, a reference must either be (1) within the field of Applicant's endeavor, or if not, (2) the subject matter logically would have commended itself to an inventor's attention in considering his or her invention as a whole. See M.P.E.P. § 2141.01(a)(I) citing *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1397 (2007).

Applicant respectfully submits that the Kelly et al. reference clearly is not within the field of Applicant's endeavor. In the present instance, the field of Applicant's endeavor is the field of home appliances and, more particularly, no-frost refrigeration devices for home appliances, NOT simply any climate control system. In stark contrast, the Kelly et al. reference is within the completely different and unrelated field of windglass fog prevention methods for a vehicle climate control system. The field of endeavor of windglass fog prevention methods for a vehicle climate control system clearly is different from the field of endeavor of no-frost refrigerators. Applicant respectfully submits that one of ordinary skill in the art would consider the field of home appliances and, more particularly, no-frost refrigeration devices for home appliances, to be in a completely different field of endeavor than climate control systems for preventing windglass fogging in automobiles.

For at least the foregoing reasons, the Kelly et al. reference clearly is not within the field of Applicant's endeavor. As set forth above, a reference that is not within the field of Applicant's endeavor may qualify as analogous art if the subject matter logically would have commended itself to an inventor's attention in considering his or her invention as a whole. See M.P.E.P. § 2141.01(a)(I) citing *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1397 (2007).

In the present instance, the subject matter of the Kelly et al. reference logically would *not* have commended itself to an inventor's attention in considering his or her invention as a whole. Properly considered as a whole, the present invention is directed to a no-frost refrigerator and method of controlling a no-frost refrigerator that controls de-humidification in the no-frost refrigeration device and reduces drying out of stored foodstuffs by the de-humidification. In stark contrast, the Kelly et al. reference very clearly is concerned with the completely unrelated problem of preventing fogging of the windglass of a vehicle.

The Kelly et al reference discloses a climate control system 10 for a vehicle that, inter alia, **increases** the blower motor speed of the blower motor 43 when the humidity in the vehicle **increases** in order to increase the flow of air to the defrost outlet 68 and onto the windglass 98 of the vehicle. Particularly, the Kelly et al reference discloses that **increasing** the blower motor speed control signal offset (BL_OFFSET) **increases** the commanded speed of the blower motor 43. The control system 10 also may **increase** the percentage of *outside air* admitted into the air mixture in the plenum potion 62 for supplying to the defrost outlet 68, panel outlet 70, and heater outlet 72, and/or turn on the rear or side window defoggers 120. See, e.g., the Kelly et al reference at col. 2, line 46 to col. 3, line 4; and col. 4, lines 18-24, 52-56, and 65-67.

When properly considered as a whole, the subject matter of increasing the blower motor speed to defog the windglass of a vehicle logically would *not* have commended itself to an inventor's attention in considering, as a whole, ways to control de-humidification in a no-frost refrigeration device and reduce drying out of stored foodstuffs by the de-humidification. Moreover, the vehicle climate control system for

reducing or preventing fogging of the windglass of the vehicle of the Kelly et al. reference does not address any need or problem known in the field of no-frost refrigerators, and indeed, clearly would not have commended itself to the attention of the ordinarily skilled artisan looking to solve problems with controlling de-humidification in a no-frost refrigeration device and reducing drying out of stored foodstuffs by the de-humidification. Indeed, the Kelly et al. reference operates in a completely different manner from the present invention, and hence, teaches away from the claimed invention.

As shown in Figures 2 and 3 of the present invention, if the moisture value (e.g., humidity) **increases** (for example, when the door of the refrigeration device is opened), then the present invention **decreases** the circulation power of the fan to reduce the heat flow between the chamber and the storage compartment, thereby intensifying the cooling of the evaporator, which causes more intensive drying of the air flowing past the evaporator. On the other hand, if the moisture value (e.g., humidity) **decreases**, then the present invention **increases** the circulation power of the fan to increase the heat flow between the chamber and the storage compartment, thereby reducing the cooling of the evaporator, which in turn reduces the drying of the air flowing past the evaporator. In this manner, the present invention controls de-humidification in a no-frost refrigeration device and reduces drying out of stored foodstuffs by the de-humidification. See, e.g., page 2, lines 1-12; page 3, lines 1-9; and page 6, lines 1-9.

In stark contrast, the Kelly et al. reference is concerned with preventing fogging of the windglass of the vehicle. The Kelly et al reference **increases** the blower motor speed when the humidity in the vehicle **increases** in order to increase the flow of air to the defrost outlet and/or **increases** the percentage of outside air admitted into the air mixture in the plenum potion 62 for supplying to the defrost outlet 68, panel outlet 70, and heater outlet 72.

Clearly, if the teachings of the Kelly et al reference were applied to a no-frost refrigerator, the increase in the speed of the blower motor 43 would reduce the cooling of the evaporator, which in turn would reduce the drying of the air flowing past the evaporator. Hence, the Kelly et al reference would <u>not</u> provide de-humidification when

applied to a refrigeration device, as opposed to a windglass fog prevention system, and clearly would not have commended itself to the attention of the ordinarily skilled artisan looking to solve problems with controlling de-humidification in a no-frost refrigeration device and reducing drying out of stored foodstuffs by the de-humidification.

Moreover, if the teachings of the Kelly et al reference were applied to a no-frost refrigerator, the increase in outside air provided by the blower motor 43 would only serve to increase the moisture value of the air in the storage compartment. Hence, the Kelly et al. reference, when properly considered as a whole, clearly would not have commended itself to the attention of the ordinarily skilled artisan looking to solve problems with controlling de-humidification in a no-frost refrigeration device and reducing drying out of stored foodstuffs by the de-humidification.

Thus, the subject matter of the Kelly et al. reference logically would not have commended itself to an inventor's attention in considering his or her invention as a whole, and therefore, the Kelly et al. reference does not qualify as analogous art.

For at least the foregoing reasons, neither the Trask reference nor the Kelly et al. reference, either individually or in combination, teaches or suggests the subject matter defined by claims 21-24, 26-34, and 37. Applicant respectfully submits that these features are not an obvious variation of the teachings of the Trask reference or the Kelly et al. reference, either individually or in combination, and would not be obvious to try based on the teachings of these references and without the benefit of the teachings of the present invention.

Applicant respectfully requests withdrawal of this rejection.

The Rejection over the Trask reference, the Kelly et al. reference, and the Shima et al. reference

Claim 25 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the Trask reference, the Kelly et al. reference, and the Shima et al. reference. Applicant respectfully traverses this rejection.

Neither the Trask reference nor the Kelly et al. reference, either individually or in combination, teaches or suggests the features of independent claim 21, from which claim 25 depends. The Shima reference also does not make up for the deficiencies of these references, and indeed, is not relied upon for these features of claim 21.

Hence, claim 25 is patentable by virtue of its dependency from claim 21, as well as for the additional features recited therein. Applicant respectfully requests withdrawal of this rejection.

The Rejection over the Trask reference and the Pesko reference

Claims 35 and 36 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Trask reference in view of the Pesko reference. Applicant respectfully traverses this rejection.

Claims 35 and 36 are patentable by virtue of their dependency from claim 12, as well as for the additional features recited therein.

Additionally, Applicant respectfully submits that the Pesko et al. reference is non-analogous art. To qualify as analogous art, a reference must either be (1) within the field of Applicant's endeavor, or if not, (2) the subject matter logically would have commended itself to an inventor's attention in considering his or her invention as a whole. See M.P.E.P. § 2141.01(a)(I) citing *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1397 (2007).

The Pesko et al. reference clearly is not within the field of Applicant's endeavor. In the present instance, the field of Applicant's endeavor is the field of home appliances and, more particularly, no-frost refrigeration devices for home appliances, NOT simply any climate control system. In stark contrast, the Pesko et al. reference is within the completely different and unrelated field of energy management systems for buildings, such as hotels, having a plurality of individually controlled spaces. See, e.g., col. 1, lines 6-9. The field of endeavor of energy management systems for buildings having a plurality of individually controlled spaces clearly is different from the field of endeavor of no-frost refrigerators. Applicant respectfully submits that one of ordinary

skill in the art would consider the field of home appliances and, more particularly, no-frost refrigeration devices for home appliances, to be in a completely different field of endeavor than energy management systems for buildings having a plurality of individually controlled spaces. For at least the foregoing reasons, the Pesko et al. reference clearly is not within the field of Applicant's endeavor.

As set forth above, a reference that is not within the field of Applicant's endeavor may qualify as analogous art if the subject matter logically would have commended itself to an inventor's attention in considering his or her invention as a whole. See M.P.E.P. § 2141.01(a)(I) citing *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1397 (2007).

In the present instance, the subject matter of the Pesko et al. reference logically would *not* have commended itself to an inventor's attention in considering his or her invention as a whole. Properly considered as a whole, the present invention is directed to a no-frost refrigerator and method of controlling a no-frost refrigerator that controls de-humidification in the no-frost refrigeration device and reduces drying out of stored foodstuffs by the de-humidification. In stark contrast, when properly considered as a whole, the Pesko et al. reference very clearly is concerned with the completely unrelated problem of energy management systems for buildings having a plurality of individually controlled spaces.

The Pesko et al. reference discloses an energy management system for buildings, such as hotels, having a plurality of individually controlled spaces that takes into account time of day, day of week, month, season, ingress, egress, window opening/closing, change in status, occupancy state, ambient noise level, light level, energy consumption, temperature drift rate and direction, humidity, environment or weather, etc, in performing the control functions. See, e.g., col. 1, lines 48-58.

When properly considered as a whole, the subject matter of energy management systems for buildings having a plurality of individually controlled spaces logically would *not* have commended itself to an inventor's attention in considering, as a whole, ways to control de-humidification in a no-frost refrigeration device and reduce drying out of

stored foodstuffs by the de-humidification. Moreover, the energy management systems for buildings having a plurality of individually controlled spaces of the Pesko et al. reference does not address any need or problem known in the field of no-frost refrigerators, and indeed, clearly would not have commended itself to the attention of the ordinarily skilled artisan looking to solve problems with controlling de-humidification in a no-frost refrigeration device and reducing drying out of stored foodstuffs by the de-humidification. Indeed, the Pesko et al. reference operates in a completely different manner from the present invention, and hence, teaches away from the claimed invention.

For at least these reasons, the subject matter of the Pesko et al. reference logically would *not* have commended itself to an inventor's attention in considering his or her invention as a whole, and therefore, the Pesko et al. reference does not qualify as analogous art.

Moreover, even assuming in arguendo that the Pesko et al. reference is analogous art to the present invention, Applicant respectfully submits that one of ordinary skill in the art would not have had an apparent reason to combine the teachings of the Trask reference with the energy management systems for buildings having a plurality of individually controlled spaces of the Pesko reference to arrive at the claimed invention.

For at least the foregoing reasons, neither the Trask reference nor the Pesko et al. reference, either individually or in combination, teaches or suggests the subject matter defined by claims 35 and 36.

Applicant respectfully submits that these features are not an obvious variation of the teachings of the Trask reference or the Pesko et al. reference, either individually or in combination, and would not be obvious to try based on the teachings of these references and without the benefit of the teachings of the present invention.

Applicant respectfully requests withdrawal of this rejection.

CONCLUSION

In view of the above, entry of the present Amendment and allowance of Claims 12, 13, 15-23, and 25-37 are respectfully requested. If the Examiner has any questions regarding this amendment, the Examiner is requested to contact the undersigned. If an extension of time for this paper is required, petition for extension is herewith made.

Respectfully submitted,

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